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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,726	10/17/2003	Patrick Brouhon	200207057-2	8281
22879 7590 09/20/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER RODRIGUEZ, LENNIN R	
			ART UNIT 2625	PAPER NUMBER
			MAIL DATE 09/20/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/686,726

Applicant(s)

BROUHON, PATRICK

Examiner

Lennin R. Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/17/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

(1) 20 and 21 in Fig. 1.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "paintbrush form-factor" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The disclosure is objected to because of the following informalities:

(1) page 6, lines 18 and 27, the reference number "12" it has been used for a "support circuitry" and for a "processor" respectively, it is unclear as to what is the real functionality of this component;

(2) page 9, line 16, "Number \_\_\_\_\_" should be replaced by the appropriate application number.

Appropriate correction is required.

***Claim Objections***

4. Claims 4, 8-10 and 14 are objected to because of the following informalities:
- (1) claim 4, line4, "means the" should be – means **on** the --;
  - (2) claim 6, line 4, "so long as" should be – so **as** long as --;
  - (3) claim 8, line2, "wherein **the** operation" should be – wherein **an** operation --;
  - (4) claim 14, lines 1-2, "pattern **are** printed" should be either – pattern **is** printed – or – patterns are printed --.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claim 11 recites the limitation "wherein the printing control means is a computer" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. It was never mention in this or the claim on which this one depends a "printing control means", such a limitation lacks of antecedent basis.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3, 11-12 and 14 rejected under 35 U.S.C. 102(b) as being anticipated by Desormeaux (US Patent 6,312,124).

(1) regarding claim 1:

Desormeaux '124 discloses a hybrid printing device for printing on a surface (Fig. 1 and Fig. 2 and column 7, lines 4-23, where in addition to a printing component the device can also contain an optical sensor), the device comprising:

a printing means adapted to print on the surface (column 2, lines 66-67 and column 3, lines 1-8); and

a sensing means adapted to sense the position of the printing device in relation to positioning indicia located on the surface wherein the printing means is further adapted to be responsive to the detected position of the device in relation to the detected position (column 7, lines 4-23, where the device can contain an optical sensor which detects indicia on a surface and responds to this indicia as to what operation to perform).

(2) regarding claim 2:

Desormeaux '124 further discloses the hybrid printing device having a handheld form-factor (column 3, lines 5-8).

(3) regarding claim 3:

Desormeaux '124 further discloses wherein the device is connected to a printing control means by a wired, wireless, RF or Infra Red link (column 6, lines 18-23).

(4) regarding claim 4:

Desormeaux '124 further discloses wherein the positioning indicia encode data describing absolute or relative positions on the surface, said indicia being optically imaged by the sensing means and thus providing an output representing the absolute position of the printing means the surface (column 7, lines 4-23, where the device can contain an optical sensor which detects indicia on a surface and where the indicia served as an optical pattern to generate a positional feedback signal).

(5) regarding claim 5:

Desormeaux '124 further discloses wherein the position of the printing means is used to control the operation of the printing means by switching the printing means on or off depending on whether the specific detected location on the surface is to be printing on (column 5, lines 57-67 and column 6 lines 1-7, where the controller coordinates the firing signals sent to the printhead to print the image according to the positional feedback signal).

(6) regarding claim 6:

Desormeaux '124 further discloses wherein the position of the sensing means, and hence the printing means, on the surface is determined by a combination of absolute position detection based on optical glyphs located on the surface (column 7, lines 18-23, where the device can contain an optical sensor which detects indicia on a surface and where the indicia served as an optical pattern to generate a positional feedback signal) and detection of movement of the sensing means relative to the surface (column 5, lines 57-67 and column 6 lines 1-7), thereby, so long as at least one

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measurement of the absolute position is performed by the sensing means, the time-varying absolute position of the sensing means may be determined by reference to that absolute position and the movement of the sensing means relative to that absolute position (column 5, lines 57-67 and column 6 lines 1-7, where the controller coordinates the firing signals sent to the printhead to print the image according to the positional feedback signal).

(7) regarding claim 8:

Desormeaux '124 further discloses wherein the hybrid printing device has a printer form-factor (column 2, lines 66-67 and column 3, lines 1-8, where the device is in a printer form) and wherein the operation of the printing means is controlled by reference to data embedded in the indicia (column 6, lines 1-7).

(8) regarding claim 9:

Desormeaux '124 further discloses wherein movement of the printing means over the surface follows a regular, random or sequential scanning pattern with the printing means being activated depending on the detected location of the sensing means and hence the printing means (column 7, lines 4-23, where the device can contain an optical sensor which detects indicia on a surface and responds to this indicia as to what operation to perform).

(9) regarding claim 10:

Desormeaux '124 further discloses wherein the movement of the printing means is optimized depending on the print control data embedded in the indicia (column 7, lines 18-23, where the printing means respond to the information in the printed indicia).



(10) regarding claim 11:

Desormeaux '124 further discloses wherein the printing control means is a computer (column 6, lines 18-23, and 62 in Fig. 4).

(11) regarding claim 12:

Desormeaux '124 further discloses a method of printing on a surface (column 2, lines 66-67 and column 3, lines 1-8);, the method comprising the steps of detecting the absolute position of a printing means in relation to the surface and activating the printing means at designated locations on the surface as a function of the detected position on that surface (column 7, lines 4-23, where the device can contain an optical sensor which detects indicia on a surface and responds to this indicia as to what operation to perform).

(12) regarding claim 14:

Desormeaux '124 further discloses wherein the indicia pattern are printed on the surface prior to use with the handheld hybrid printing device (column 7, lines 18-23, where the indicia placed on a print surface (emphasis in the past tense of place) is a clear indication that the indicia was previously placed in the surface).

(13) regarding claim 15:

Desormeaux '124 further discloses wherein the hybrid printing device is responsive to printing commands encoded on or into the surface whereby the hybrid device prints on the surface as it is passed over the surface in a manner which is controlled by the data contained in the area of the printing surface which is imaged by the device (column 7, lines 4-23, where the device can contain an optical sensor which

detects indicia on a surface and responds to this indicia as to what operation to perform).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desormeaux (US Patent 6,312,124) as applied to claims above, and further in view of Ferla et al. (US Patent 5,355,303).

Desormeaux '124 discloses all the subject matter as described above except wherein the hybrid printing device is configured with a paintbrush form-factor whereby a sweeping action of the device over the surface will result in printing at designated locations on the surface.

However, Ferla '303 teaches wherein the hybrid printing device is configured with a paintbrush form-factor whereby a sweeping action of the device over the surface will result in printing at designated locations on the surface (column 19, lines 44-53, where the printer prevents interferences between the edges of the beam).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the hybrid printing device is configured with a paintbrush form-factor whereby a sweeping action of the device over the surface will

result in printing at designated locations on the surface as taught by Ferla '303, in the system of Desormeaux '124. With this it would add more capabilities to the system, making it more versatile.

11. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desormeaux (US Patent 6,312,124) as applied to claim 12 above, and further in view of Ichimura (US Patent 5,878,200).

Desormeaux '124 discloses all the subject matter as described above except wherein a printing control means remembers at which locations on the surface have already been printed on, thereby allowing the movement of the hybrid device over the surface to be interrupted.

However, Ichimura '200 teaches wherein a printing control means remembers at which locations on the surface have already been printed on, thereby allowing the movement of the hybrid device over the surface to be interrupted (column 5, lines 18-31, where the print control code makes sure the printed portion is skip from further printing thereon).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a printing control means remembers at which locations on the surface have already been printed on, thereby allowing the movement of the hybrid device over the surface to be interrupted as taught by Ichimura '200, in the system of Desormeaux '124. With this the system makes sure that the printing device does not re-print or print something over a surface that has been printed thereon before.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Montgomery et al. (US Patent 4,797,544) discloses in order to track the location of the optical scanner relative to the printed page, thus facilitating entry of information into the bit map, an optical mouse (19) is included in the scanner. In accordance with another embodiment of this invention, two optical mice (19, 150) are provided on the scanner (148) to indicate not only the position of the scanner relative to the page but also the angle that the scanner is held at relative to the page. The scanner can be used in conjunction with an optical character recognition device, a photocopying device, or any of a number of other devices (see abstract).


13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lennin R. Rodriguez whose telephone number is (571) 270-1678. The examiner can normally be reached on Monday - Thursday 7:30am - 6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lennin Rodriguez  
9/14/07



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